

## CLAIMS

1. An automatic injection device comprising  
piston holders holding cylinder pistons and plural  
5 systems of heads having a drive mechanism for moving the  
piston holders forward and backward, whereby the device  
can hold a plurality of syringes and operates injection  
or suction in each syringe independently,

said device comprising a backward-moving  
10 prohibition mechanism for prohibiting the backward-moving  
of the piston holder of a second head when the piston  
holder of a first head is in a forward-moving state and  
the piston holder of the second head is in a stopped  
state.

15 2. The automatic injection device according to  
claim 1, wherein said drive mechanism has a motor and  
mechanism for converting the rotation of the motor into a  
linear movement, and said backward-moving prohibition  
20 mechanism prohibits the axis of rotation to rotate in the  
backward direction.

3. The automatic injection device according to  
claim 1, wherein said drive mechanism has a motor and  
25 mechanism for converting the rotation of the motor into a  
linear movement, and said backward-moving prohibition

mechanism prohibits the linear movement in the backward direction.

4. The automatic injection device according to claim 1, wherein said backward-moving prohibition mechanism is selected from the group consisting of an electromagnetic brake, a disc brake, a ratchet and a worm gear.

5. The automatic injection device according to claim 1, wherein said device is a double head type with the number of systems of heads being two and holds two syringes.

6. The automatic injection device according to claim 1, wherein said device holds a syringe for injecting a contrast medium and another syringe for injecting a physiological saline solution.

7. The automatic injection device according to claim 5, wherein said device holds a syringe for injecting a contrast medium at the first head and a syringe for injecting a physiological saline solution at the second head.

8. The automatic injection device according to

claim 5, wherein the tips of the two syringes are  
connected to a three way-branched tube.

9. The automatic injection device according to  
5 claim 7, wherein the tips of the two syringes are  
connected to a three way-branched tube.